

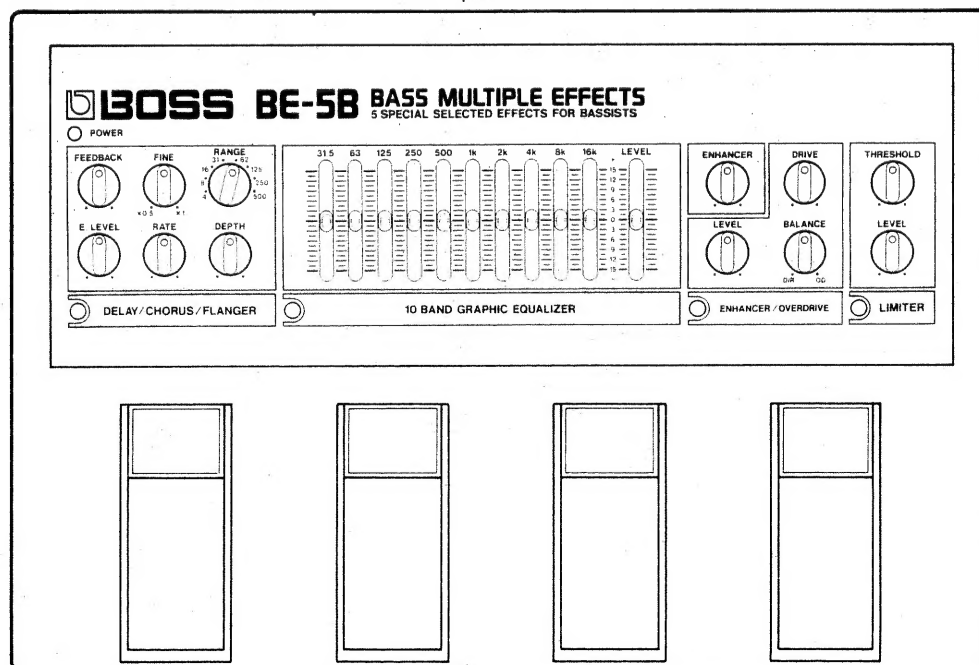


# BASS MULTIPLE EFFECTS

5 SPECIAL SELECTED EFFECTS FOR BASSISTS

## BE-5B

Owner's Manual



Thank you, and congratulations on your choice of the BOSS BE-5B Bass Multiple Effects unit.

The BE-5B is a multi-purpose effects unit equipped with all five of the effects most often needed with bass guitars. In order to make good use of all the features available to you, and be able to continue using the unit for many years with confidence, please completely read this Owner's Manual before you start using it.

## ■ FEATURES

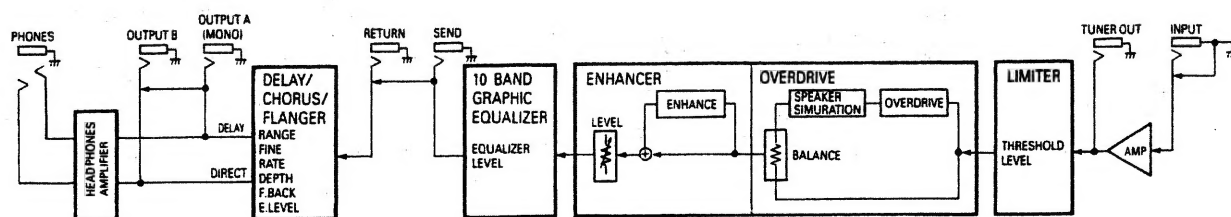
- The BE-5B is a multiple unit combining five different effects for use with basses. Settings can be made with ease since there is no need for bothering with connections between a number of units.
- Offers a great selection of high-quality effects, ranging from a limiter, essential for bass guitars, to a digital delay equipped with modulation control.
- The overdrive, specialized for use with bass, is provided with a speaker simulation circuit, so you can obtain a fat, rich bass sound even when recording straight from the line outputs.
- Includes Send/Return jacks so you can easily add on even other effects or a volume pedal.
- A Tuner Output jack provides for connection of a tuner, which you can use even without changing the connection.
- Provided with headphones jack, convenient when practicing alone.

## ■ IMPORTANT NOTES

- When you make any connections with other devices, always turn off the power to all equipment first. This will help in preventing malfunction, and damage to speakers.
- Do not force the unit to share the same power outlet as one used for distortion producing devices (such as motors, variable lighting devices). Be sure to use a separate power outlet.
- Before using the AC adaptor, always make certain the voltage of the available power supply conforms to its rating.
- Do not place heavy objects onto, step on, or otherwise risk causing damage to the power cord.
- Whenever you disconnect the AC adaptor from the outlet, always grasp it by the plug, to prevent internal damage to the cord and the hazard of possible short circuits.
- If the unit not to be used for a long period of time, unplug the cord from the socket.
- Avoid using or the unit in the following places, as damage could result.
  - Place subject to extremes in temperature. (Such as under direct sunlight, near heating units, above equipment generating heat, etc.)
  - Places near water and moisture. (Baths, washrooms, wet floors, etc.) Places otherwise subject to high humidity.
  - Dusty environments.
  - Places where high levels of vibration are produced.
- Placing the unit near power amplifier or other equipment containing large transformers may induce hum.
- Should the unit be operated nearby television or radio receivers, TV pictures may show signs of interference, and static might be heard on radios. In such cases, move the unit out of proximity with such devices.
- For everyday cleaning, wipe the unit with a soft dry cloth, or one that is dampened slightly. To remove dirt that is more stubborn, wipe using a mild, neutral detergent. Afterwards, make sure to wipe thoroughly with a soft cloth.
- Never apply benzene, thinners, alcohol or any like agents, to avoid the risk of discoloration and deformation.
- Protect the unit from strong impact.
- Avoid getting any foreign objects (coins, wire, etc.), or liquids (water, drinks, etc.) into the unit.
- Before using the unit in a foreign country, check first with your local Roland Service Station.
- At any time that you notice a malfunction, or otherwise suspect there is damage, immediately refrain from using the unit. Then contact the store where bought, or the nearest Roland Service Station.

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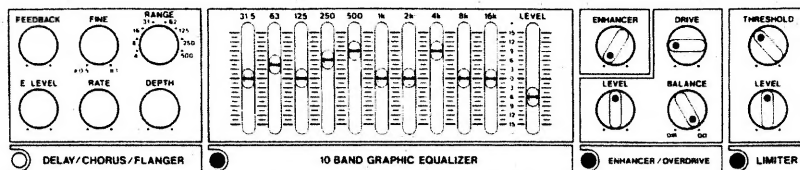
## ■ BLOCK DIAGRAM



## ■ SAMPLE SETTINGS

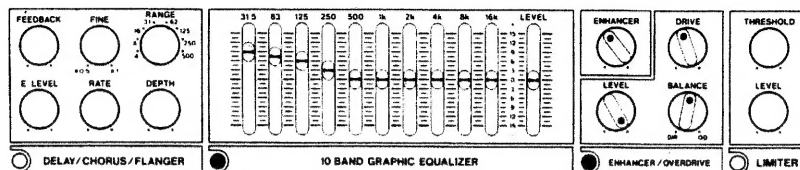
### ■ ROCK

A sound that fits right in with the current rock scene. The trick is in using just the right touch of overdrive



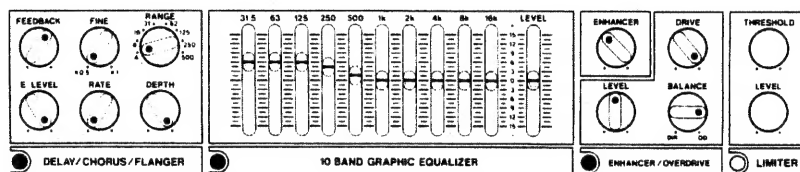
### ■ METAL

With the overdrive providing a little distortion, the equalizer boosts the lower range to make a fat sound that is just right for heavy metal.



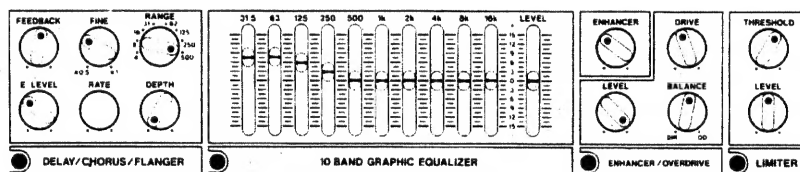
### ■ FLANGING METAL

The overdrive puts out a good measure of distortion along with a lot of wailing from the flanger to add up to a really strong flanged sound.



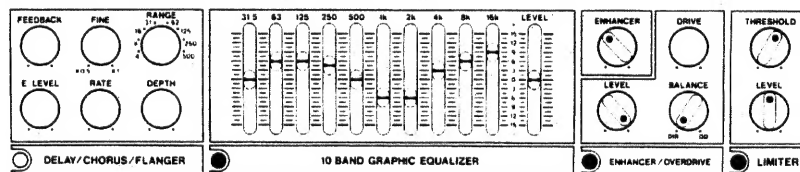
### ■ METAL SOLO

A long delay provides a sound good for melodious phrasing.



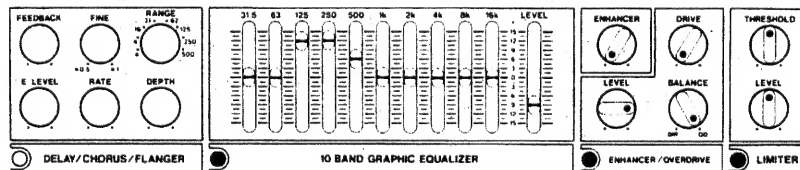
### ■ CHOPPER

With the limiter smoothing all the peaks, the enhancer and equalizer create a sound with an impressive attack



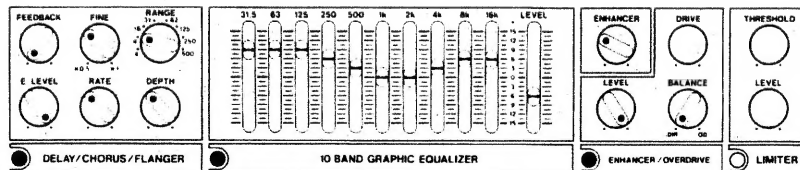
### ■ JAZZ

Equalizer used to raise the lower range and bring out the feel of a wood bass.



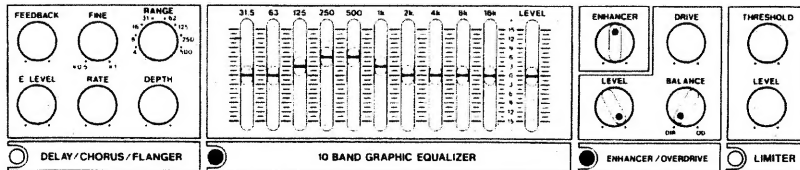
### ■ SLOW BALLAD

With chorus applied, and the equalizer used to raise the lower range, a sound filled with fantasy is created. In addition, clarity is preserved by raising the upper range with the enhancer and equalizer. Great for solos.

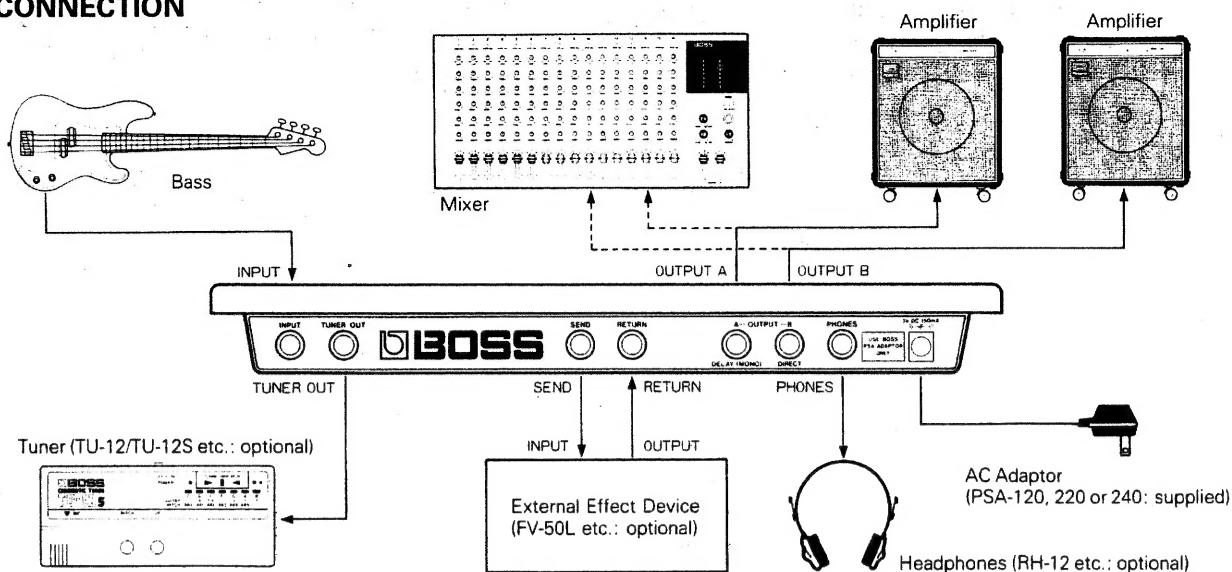


### ■ SAMBA

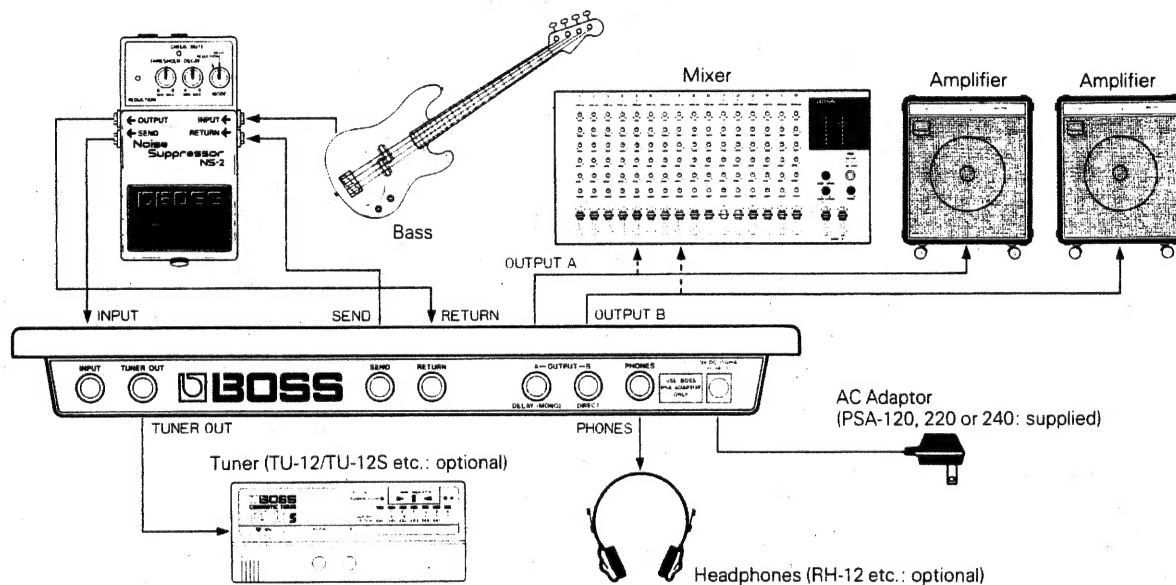
The equalizer is used to emphasize the middle range, and the enhancer cleans up the profile. Suitable for rhythmical songs.



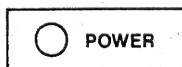
## ■ CONNECTION



- Should noise be considered a problem, the NS-2 Noise Suppressor (optional) should be used.



## ■ OPERATION



1. Once the bass and amplifier have been connected as shown in the illustration, connect the supplied AC adaptor. The unit is ready for use when its Power Indicator lights.

\* Make sure volume is raised after connection is finished.

2. Each knob is set so it appears as shown in "PANEL DESCRIPTIONS".

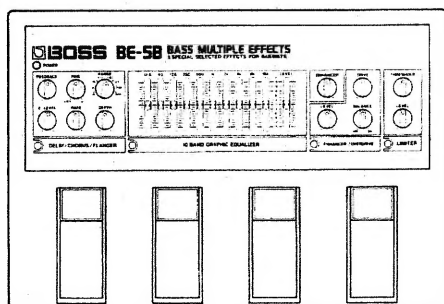
3. Make the settings for each of the effects.

- ① Use the Pedal Switch to turn "on" the effect that is to be set. (When on, the Effects Indicators for that effect will light.)

\* All other effects need to be "off."

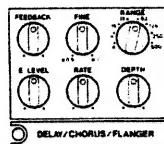
- ② While referring to "SAMPLE SETTINGS", under "PANEL DESCRIPTIONS", make settings as desired.

- ③ Repeat the above procedures and make settings for the other effects.



## ■ PANEL DESCRIPTIONS

### DELAY/CHORUS/FLANGER



The digital delay is equipped with controls for modulation. Can be used to fatten a sound by adding slightly delayed elements, or provide the effects of long delays. Since the BE-5B employs a digital delay, there is no deterioration in the quality of the source sound. Settings for delay time are accepted consecutively from 2 to 500 msec. In addition, thanks to the modulation function, chorus and flanging effects can be obtained. (See EXAMPLES FOR SETTING DELAY/CHORUS/FLANGER.)

#### ⑫ RANGE: Delay Time Range knob

Adjusts, in combination with the FINE knob, the delay time (amount of delay with respect to the source sound). The RANGE knob accepts 8 levels of possible settings for the delay time.

[↺]: Range providing longer delay times. Used to set for a delay providing a recognizable delayed sound.

[↻]: Range providing shorter delay times. Used to get a short delay, which can be used to fatten up sound.

#### ⑬ DEPTH: Modulation Depth knob

Adjusts the depth of the modulation when the digital delay is used to obtain chorus or flanging effects.

[↺]: Modulation is deepened.

[↻]: Modulation is lessened. At the minimum, no modulation is obtained.

#### ⑭ FINE: Delay Time Fine knob

Provides for fine adjustment of the delay time set with the RANGE knob. The available range provides for a multiplier of from 0.5 to 1.0 times the value set with the RANGE knob.

[↺]: Delay time is lengthened. [↻]: Delay time is shortened.

#### ⑮ RATE: Modulation Rate knob

Adjusts the rate of the modulation when the digital delay is used to obtain chorus or flanging effects.

[↺]: The modulation rate is made faster. [↻]: The modulation rate is made slower.

\* With the Modulation Depth knob set too low, no effect results.

#### ⑯ FEEDBACK: Feedback knob

Adjust the amount of the delayed sound that is repeated (amount of feedback).

[↺]: Increases amount of feedback.

[↻]: Decreases amount of feedback. When set at the minimum, one repetition takes place (there is a single delay).

\* Take caution, since oscillation can occur if the amount of the FEEDBACK knob sets too high.

#### ⑰ EFFECT LEVEL: Effect Level knob

Adjust the level of the delayed sound.

[↺]: The delayed sound is increased. When at the maximum, the delayed sound and the direct sound are identical.

[↻]: The delayed sound is decreased. When at the minimum, only the direct sound is output; no output of the delayed sound takes place.

#### ① Power Indicator

Lights up when the supplied AC adaptor is connected indicating that the unit is ready for use.

#### ② Effects Indicators

Light up for an effect that is on (When its effects can be obtained). Allow you to confirm the on/off status of each effect.

#### ③ Pedal Switch

Switch each effect on or off.

#### ⑪ Input Jack

Accepts connection of a bass guitar.

#### ⑫ Tuner Out Jack

From the Tuner Out jack, tuner-use bass guitar signals are output at all times. Tuning can be carried out at any time simply by connecting a tuner.

#### ⑬ Send Jack

#### ⑭ Return Jack

The Send/Return jacks provide for the connection of an external device, such as an external effects device. An effects unit is connected between the graphic equalizer and the delay.

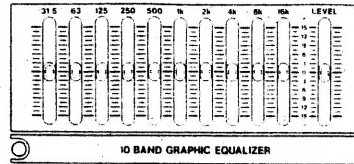
\* Refer to the diagram when making connection.

[Example Setup]

A volume pedal (FV-50L) can be connected. Then, using a volume altering technique, you can obtain a natural decay of the sound while having the delayed sound remain (when the unit is set to the Delay mode).

If you set the volume of the pedal to the "0" position, tuning can be performed without getting the sound from the amplifier.

## 10 BAND GRAPHIC EQUALIZER



The 10-band graphic equalizer provides adjustment within the range of  $\pm 15$  dB for each band.

### 10 LEVEL CONTROL: Level Control slider

Sets the overall level output by the equalizer. Should be adjusted so there is no difference in level when the effect is turned on/off.

[↑]: The overall level output by the equalizer increases.

[↓]: The overall level output by the equalizer decreases.

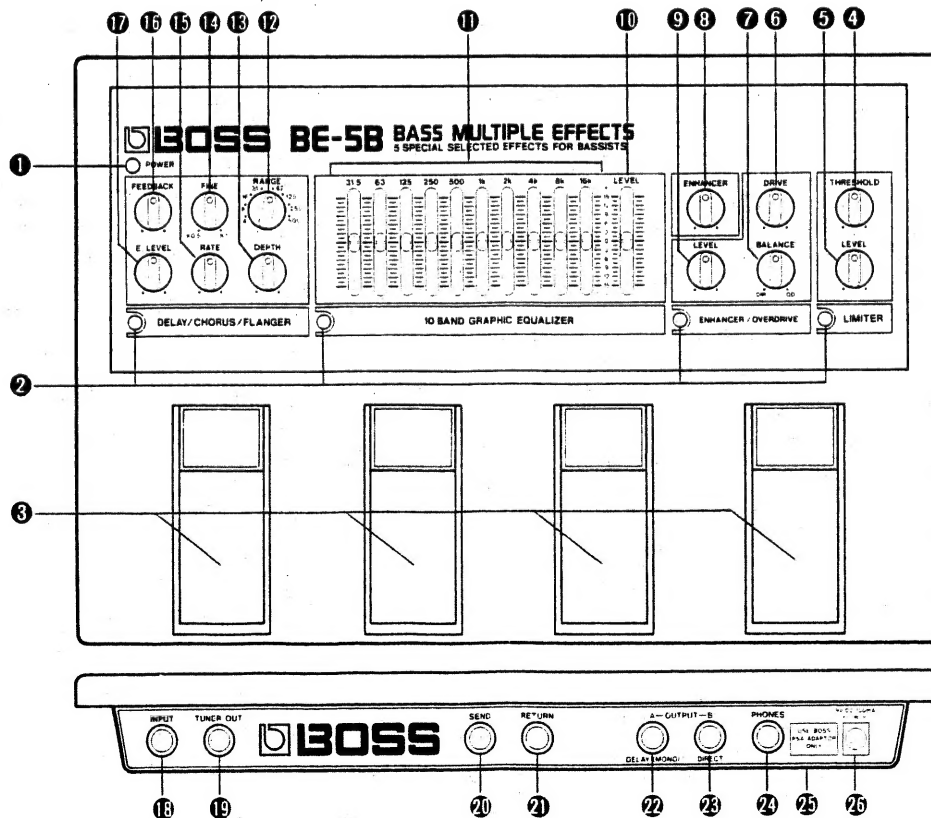
### 11 EQUALIZER CONTROL:

#### Equalizer Control slider

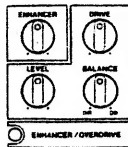
Provides for boosting or cutting the sound for each band.

[↑]: Boosts the sound only for the band for which the control slider is moved.

[↓]: Cuts the sound only for the band for which the control slider is moved.



## ENHANCER/OVERDRIVE



This effect combines both an enhancer, that provides greater definition for the sound; and overdrive to add distortion to the sound. They can be set in any variety of ways to suit most any type of music. In addition, the overdrive contains a speaker simulation circuits, thus allowing direct connection to a mixer or other device.

### ④ DRIVE: Drive knob

Adjusts the amount of tube-amp distortion produced by the overdrive.

[↻]: Distortion becomes greater, sound gets heavier.

[↺]: Distortion decreases. When turned all the way to the left [↺], distortion disappears, and only speaker simulation will be in effect.

### ⑤ BALANCE: Balance knob

Adjusts the balance between the normal sound and the overdriven sound. Settings covering any number of possible combinations can be made.

[↻]: The proportion of the overdriven sound (speaker simulation) increases.

[↺]: The normal sound's proportion becomes greater.

- When set at either right [↻] or left [↺] extremes, the effect of the counterpart is eliminated.

- When wishing to use the speaker simulation circuit alone, set the drive knob to its minimum [↺], and the balance knob to the maximum [↻].

### ⑥ ENHANCER: Enhancer knob

Enhances the definition of each sound, and provides more presence.

[↻]: Enhancer effect becomes greater.

[↺]: Enhancer effect is lessened. When at left [↺] extreme, no effect is obtained.

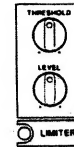
### ⑦ LEVEL: Level knob

Adjusts the level of sound volume for the Enhancer/Overdrive. Should be adjusted so there is no difference in level when the effect is turned on/off.

[↻]: The volume of effected sound increases.

[↺]: The volume of effected sound decreases. When at left [↺] extreme, no sound will be heard.

## LIMITER



By limiting excessive input (in excess of peak), erratic volume changes are eliminated, and the sound is more balanced, and freer from unwanted distortion. When used with styles like slapping with a bass guitar, the peak sound is controlled better and sound balance improves.

### ④ THRESHOLD: Threshold Knob

Sets the level at which it starts limiting the input signal. Whenever a signal that surpasses the level set here has been input, the output is limited to the level set. Signals lower than this level (Threshold Level) will continue to be output.

[↻]: Threshold level is raised.

[↺]: Threshold level is lowered; effect of limiter is increased.

### ⑤ LEVEL: Level knob

Sets the overall level output by the limiter. Should be set so there is no difference in level when the effect is turned on/off.

[↻]: The overall level output by the limiter increases.

[↺]: The overall level output by the limiter decreases.

### ② Output A Jack (monaural)

### ③ Output B Jack

Jacks used to connect an amplifier.

- When used with one amp, connect to Output A (monaural).

- When used with two amps, and with the DELAY/CHORUS/FLANGER at "off", the same sound will be output from both amps. With DELAY/CHORUS/FLANGER at "on", the delay sound will be output from Output A, and the direct sound, will be output from Output B.

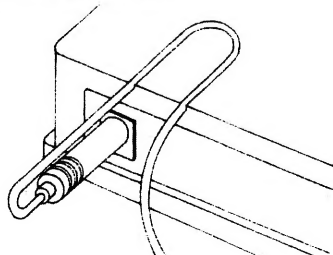
### ④ Headphones Jack

Accepts connection of headphones. Volume is adjusted using the connected instrument.

- Take caution, since oscillation can occur if the amount of the gain sets too high.

### ⑤ Cord Clip

Prevents the AC adaptor plug from being pulled out accidentally. The cord should be fixed to the unit as shown in the illustration.



### ⑥ AC Adaptor Jack

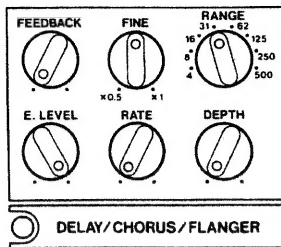
Accepts connection of supplied AC Adaptor (PSA-120, 220 or 240)

## ■ EXAMPLES FOR SETTING DELAY/CHORUS/FLANGER

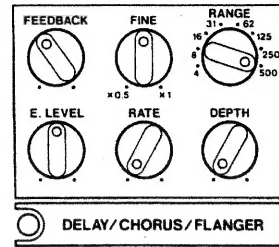
Through knob settings for DELAY/CHORUS/FLANGER three types of effects can be applied. Here, some of the most representative examples will be covered.

### ● Digital Delay

#### ○ Short Delay

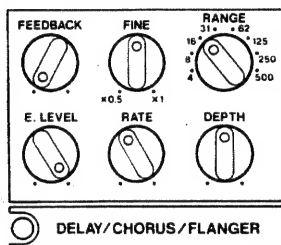


#### ○ Long Delay



Modulation function will not work by setting the DEPTH knob too low. This setting will produce the Delay effect only.

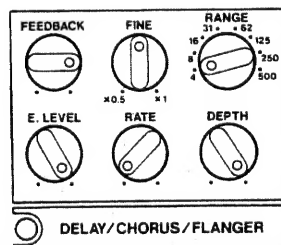
### ● Digital Chorus



The chorus effect will be obtained by rotating the DEPTH knob clockwise. The FEEDBACK knob should be set at the minimum.

\* Ordinarily, the delay time is made short.

### ● Digital Flanger



The DEPTH knob is set at the maximum. Then when the FEEDBACK knob is rotated clockwise, the flanging effect is obtained.

\* Ordinarily, the delay time is made short.



## ■ SPECIFICATIONS

### Controls

#### «1» Limiter

Threshold, Level

#### «2» Enhancer/Overdrive

Drive, Balance, Enhancer, Level

#### «3» 10-Band Graphic Equalizer

Level Control, 10 Equalizer Controls

#### «4» Delay/Chorus/Flanger

Range, Fine, Modulation Rate, Modulation Depth, Feedback, Effect Level.

### Switches

Pedals: 4

### Indicators

Effect: 4 Power: 1

### Jacks

Input, Tuner Out, Send, Return, Output A (monaural), Output B, Phones, AC adaptor.

### Electrical Characteristics

#### Input

Rated Input Level: -20dBm

Input Impedance: 1M $\Omega$

#### Tuner Out

Rated Output Level: -20dBm

Output Impedance: 2k $\Omega$

Output Load Impedance: more than 20k $\Omega$

#### Effect Send

Rated Output Level: -20dBm

Output Impedance: 1k $\Omega$

Output Load Impedance: more than 10k $\Omega$

#### Effect Return

Rated Input Level: -20dBm

Input Impedance: 47k $\Omega$

#### Digital Delay

Process: Analog Logarithmic Compression, Plus 12-bit Quantization

Delay Time: 2msec. to 500msec.

Frequency Response: Delay: 20Hz to 15kHz ( $\pm 1$ dB)

Residual Noise: Less Than -90dBm (IHF-A) with Fine  $\times 0.5$

#### Output A/B

Rated Output Level: -20dBm

Output Impedance: 1k $\Omega$

Output Load Impedance: more than 10k $\Omega$

#### Phones

Output Impedance: 47 $\Omega$

Optimum Headphones Impedance: 8 to 100 $\Omega$

\* 0dBm=0.775V

**Power Supply:** 9 VDC (PSA-120, 220 or 240 AC Adaptor, Supplied)

**Current Draw:** 150mA (max.)

**Dimensions:** 300(W)  $\times$  40(H)  $\times$  200(D) mm.

11-13/16"(W)  $\times$  1-5/8"(H)  $\times$  7-7/8"(D)

**Weight:** 950g/2lb, 2oz (not including AC Adaptor)

**Supplied Accessories:** Owner's Manual, AC Adaptor

**Options:** Chromatic Tuner (TU-12, TU-12S), Volume Pedal (FV-50L)

\* The specifications for this product are subject to change without prior notice, in the interest of improvement.

**Note:** Any settings that place all knobs at their maximum can result in a range of problems, such as noise and howling.

For West Germany

### Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, daß der/die/das

BOSS BASS MULTIPLE EFFECTS BE-5B

(Gerät. Typ. Bezeichnung)

in Übereinstimmung mit den Bestimmungen der

Amtsbl. Vfg 1046/1984

(Amtsblattverfügung)

funk-entstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

Roland Corporation Osaka/Japan

Name des Herstellers/Importeurs

For the USA

### RADIO AND TELEVISION INTERFERENCE

**WARNING —** This equipment has been verified to comply with the limits for a Class B computing device, pursuant to Subpart J, of Part 15, of FCC rules. Operation with non-certified or non-verified equipment is likely to result in interference to radio and TV reception.

The equipment described in this manual generates and uses radio frequency energy. If it is not installed and used properly, that is, in strict accordance with our instructions, it may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J, of Part 15, of FCC Rules. These rules are designed to provide reasonable protection against such a interference in a residential installation. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by the following measure:

• These devices usually require Roland designated shielded I/O cables. For Roland devices, you can obtain the proper shielded cable from your dealer. For non-Roland devices, contact the manufacturer or dealer for assistance.

If your equipment does cause interference to radio or television reception, you can try to correct the interference by using one or more of the following measures:

- Turn the TV or radio antenna until the interference stops.
- Move the equipment to one side or the other of the TV or radio.
- Move the equipment farther away from the TV or radio.
- Plug the equipment into an outlet that is on a different circuit than the TV or radio. (That is, make certain the equipment and the radio or television set are on circuits controlled by different circuit breakers or fuses.)
- Consider installing a rooftop television antenna with coaxial cable lead-in between the antenna and TV. If necessary, you should consult your dealer or an experienced radio/television technician for additional suggestions. You may find helpful the following booklet prepared by the Federal Communications Commission: "How to Identify and Resolve RF-Do — TV Interference Problems."

This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 004-000-00345-4

For Canada

#### CLASS B

#### NOTICE

This digital apparatus does not exceed the Class B limits for radio noise emissions set out in the Radio Interference Regulations of the Canadian Department of Communications.

#### CLASSE B

#### AVIS

Cet appareil numérique ne dépasse pas les limites de la classe B au niveau des émissions de bruits radioélectriques fixés dans le Règlement des signaux parasites par le ministère canadien des Communications.

**Roland®**

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** BOSS**